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UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA

INTRI-PLEX TECHNOLOGIES, INC.

Plaintiff,

vs.

NHK INTERNATIONAL CORPORATION;
NHK SPRING CO., LTD.; OGAKI SEIKO CO.,
LTD.; and SEIKO HIGH TEC CORP.

Defendants.

Case No. 5:17-cv-01097

**COMPLAINT FOR PATENT
INFRINGEMENT**

DEMAND FOR JURY TRIAL

1 Plaintiff Intri-Plex Technologies, Inc. (“IPT” or “Plaintiff”), by its attorneys,
2 Simpson Thacher & Bartlett LLP, for its complaint (“Complaint”) against Defendants NHK
3 International Corporation, NHK Spring Co., Ltd., Ogaki Seiko Co., Ltd., and Seiko High Tec
4 Corp. (collectively, “Defendants”), alleges as follows:

5 **NATURE OF ACTION**

6 1. Intri-Plex Technologies, Inc. is the owner of United States Patent No. 6,183,841
7 (the “841 Patent” or the “Patent-in-Suit”).

8 2. This is a civil action for the infringement of the Patent-in-Suit, including the
9 willful infringement of the Patent-in-Suit by Defendants.

10 3. The technology at issue pertains to swage mounts for attaching a suspension
11 assembly to an actuator arm in hard disk drives (HDDs).

12 **THE PARTIES**

13 4. Plaintiff Intri-Plex Technologies, Inc. (“IPT”) is a corporation organized and
14 existing under the laws of California with a principle place of business at 751 South Kellogg
15 Avenue, Santa Barbara, California 93117.

16 5. On information and belief, Defendant NHK International Corporation (“NHK
17 USA”) is a company organized and existing under the laws of Michigan with a principle place of
18 business at 46855 Magellan Drive, Novi, Michigan 48377 and offices at 2350 Mission College
19 Blvd., Suite 1090, Santa Clara, California 95054. NHK USA may be served with process by
20 serving its registered agent, Richard Harvey at 2350 Mission College Blvd., Suite 1090, Santa
21 Clare [sic], California, 95054.

22 6. On information and belief, Defendant NHK Spring Co., Ltd. (“NHK Japan”) is a
23 company organized and existing under the laws of Japan with a principle place of business at 3-
24 10 Fukuura, Kanazawa-ku, Yokohama, 236-0004, Japan.

25 7. NHK Japan and NHK USA are referred to herein collectively as NHK.

26 8. On information and belief, Defendant Ogaki Seiko Co., Ltd. (“Ogaki Seiko”) is a
27 company organized and existing under the laws of Japan with a principle place of business at 3-
28 92-1 Asanishi, Ogaki-shi, Gifu-Prefecture, Japan 503-0945.

9. On information and belief, Defendant Seiko High Tech Corp. (“Seiko High Tech”) is a company organized and existing under the laws of Japan with a principle place of business at 3-92-1 Asanishi, Ogaki-shi, Gifu-Prefecture, Japan 503-0945.

10. Ogaki Seiko and Seiko High Tech are referred to herein collectively as OSK.

JURISDICTION AND VENUE

11. This action is based upon and arises under the Patent Laws of the United States, 35 U.S.C. § 100 *et seq.*, including, but not limited to, 35 U.S.C. § 271.

12. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

13. This Court has personal jurisdiction over Defendants because, among other things, Defendants have committed, aided, abetted, induced, and/or participated in the commission of patent infringement in this judicial district and elsewhere that led to foreseeable harm and injury to IPT. Defendants, directly or through intermediaries, supply infringing swage mounts that are incorporated into HDD products that are and have been offered for sale, sold, purchased, and used within the State of California and this District, including without limitation by Defendants’ direct or indirect customer HGST, Inc. (“HGST”) with its principal place of business at 3404 Yerba Buena Road, San Jose, California 95135, which is in this District. Defendants, directly or through established distribution channels, place infringing swage mounts into a regular and anticipated stream of commerce with the knowledge, understanding, and desire that the infringing swage mounts will be incorporated into HDD products that are sold all over the United States and in the State of California. In addition, NHK USA has purposefully availed itself of the privileges of conducting business in the State of California and this District by, *inter alia*, maintaining an office and designating an agent for service of process in this District.

14. Venue is proper in this district under 28 U.S.C. §§ 1391 and 1400(b).

INTRADISTRICT ASSIGNMENT

15. Pursuant to Civil L.R. 3-2(c) and 3-5(b), this is an Intellectual Property Action subject to assignment on a district-wide basis.

16. On February 6, 2001, the United States Patent and Trademark Office (“USPTO”) duly and legally issued U.S. Patent No. 6,183,841, titled “Optimized Low Profile Swage Mount Base Plate Attachment of Suspension Assembly for Hard Disk Drive,” to inventors Kevin Hanrahan and Ryan Schmidt (the “’841 Patent”). A true and correct copy of the ’841 Patent is attached as **Exhibit A** to this Complaint.

17. By assignment, IPT owns all right, title, and interest in and to the Patent-in-Suit, including, but not limited to, the right to enforce the Patent-in-Suit and collect damages for past and future infringements.

IPT and Its Swage Mount Technology

18. Data in hard disk drives (HDDs) are stored on magnetizable surfaces of rotatable disks. Transducer heads that write data to and read data from the disk surfaces are attached to one end of a suspension assembly that is connected to an actuator arm. The primary method of attaching the suspension assembly to the actuator arm is using a swage mount that forms a part of the suspension assembly. A swage mount has a flat flange portion and a cylindrical hub portion or boss. A swage ball is passed through the cylindrical hub to force the peripheries of the hub to expand (swage) into tight interference engagement with the inner peripheries of the actuator arm boss holes. The design of these swage mounts is important for forming a strong connection between the actuator arm and the suspension assembly.

19. IPT is one of the largest manufacturers of swage mounts in the world. IPT has also made, and continues to make, substantial contributions to the development of swage mount technology and owns more than 25 patents world-wide related to swage mounts.

20. NHK is a manufacturer and supplier of suspension assemblies for use in HDDs. Certain suspension assemblies that NHK manufactures and supplies incorporate swage mounts that utilize the patented technology of the Patent-in-Suit.

1 21. On information and belief, the infringing swage mounts that NHK incorporates
2 into its suspension assemblies are either manufactured by NHK or sourced from other
3 companies. One such company that manufactures infringing swage mounts for NHK is OSK.

4 22. On information and belief, NHK supplies suspension assemblies utilizing
5 infringing swage mounts to third-party HDD manufacturers, including HGST.

6 23. On information and belief, third-party HDD manufacturers like HGST incorporate
7 NHK's suspension assemblies utilizing infringing swage mounts into HDD products that are
8 offered for sale and sold in the global market, including in the United States and in this judicial
9 district.

10 24. On information and belief, NHK USA, through its Santa Clara, California
11 operations, provides sales, engineering, and support services for NHK's suspension assemblies.
12 On information and belief, NHK USA manages the initial sales process for suspension
13 assemblies with third-party HDD manufacturers like HGST.

14 25. On information and belief, NHK USA, at a minimum, receives sample suspension
15 assemblies utilizing infringing swage mounts and supplies the samples to third-party HDD
16 manufacturers like HGST so that the samples may be tested and qualified for inclusion in HDD
17 products.

18 26. On information and belief, once the sample suspension assemblies utilizing
19 infringing swage mounts are qualified for inclusion in HDD products by third-party HDD
20 manufacturers like HGST, NHK enters into agreements to supply suspension assemblies utilizing
21 infringing swage mounts to the third-party HDD manufacturers like HGST.

22 27. On information and belief, OSK supplies suspension assembly manufacturers and
23 suppliers, including at least NHK, with infringing swage mounts with the knowledge and
24 specific intent that OSK's swage mounts will be incorporated into HDD products that will be
25 offered for sale and sold by third-party HDD manufacturers like HGST in the global market,
26 including in the United States and in this judicial district.

27 28. On information and belief, NHK supplies third-party HDD manufacturers like
28 HGST with suspension assemblies utilizing infringing swage mounts with the knowledge and

specific intent that they will be incorporated into HDD products that will be offered for sale and sold by third-party HDD manufacturers like HGST in the global market, including in the United States and in this judicial district.

Defendants' Knowledge of the Patent-in-Suit

29. OSK has had actual knowledge of the Patent-in-Suit since at least as early as April 30, 2007.

30. NHK has had actual knowledge of the Patent-in-Suit since at least as early as June 29, 2007.

31. In April 2007, IPT informed OSK of potential violations by OSK of IPT's patented technology. On or about April 30, 2007, representatives from IPT and OSK met in Japan for two days to discuss the specific patents of concern, including the Patent-in-Suit. During the meeting, OSK conducted an evaluation of the swage mount parts it was producing at the time and concluded that six of them were likely in violation of certain of IPT's patents, including the Patent-in-Suit.

32. From May to June 2007, IPT and OSK were engaged in negotiations regarding the terms for a patent license agreement to OSK. OSK indicated that it could not enter into a license agreement without consulting with its swage mount customers. Ultimately, OSK requested that IPT negotiate directly with its largest customer, NHK.

33. On or about June 29, 2007, representatives from IPT, NHK, and OSK met in Japan to discuss certain of IPT's patents, including the Patent-in-Suit, and potential structure of a license agreement.

34. License negotiations continued for over a year, but ultimately were unsuccessful. In July 2008, discussions shifted to developing a meaningful business relationship between IPT and NHK for the supply of swage mounts covered by IPT's patented technology, including the Patent-in-Suit.

35. On or about November 5, 2008, NHK submitted the first of many RFQs (Request for Quote) to IPT for certain of its patented swage mounts. From November 2008 through 2013, the size of NHK's orders for IPT's patented swage mounts steadily increased.

36. Since 2013, the size of NHK's orders for IPT's patented swage mounts has dropped significantly.

37. On information and belief, even though NHK has been ordering certain patented swage mounts from IPT since 2008, NHK has separately continued to infringe IPT's patents, including the Patent-in-Suit.

38. In April 2016, IPT initiated discussions with NHK to address NHK's ongoing infringement of IPT's patents, including the Patent-in-Suit, and to attempt to resolve the matter amicably.

39. No meaningful progress has been made in reaching a resolution with NHK.

FIRST COUNT FOR RELIEF

Infringement of U.S. Patent 6,183,841

40. The allegations in the forgoing paragraphs of this Complaint are incorporated by reference herein as if restated and set forth in full.

41. With knowledge of the '841 Patent, Defendants have been and now are (i) making, using, offering to sell, selling, and/or importing into the United States and/or (ii) inducing others to directly use, offer for sale, sell, and/or import into the United States infringing swage mounts for use in certain HDD products, including, but not limited to, the HGST Ultrastar 7K6000 (model number 0F23021, serial number NAG6m7WX). The swage mounts incorporated into these HDD products infringe at least Claim 1 of the '841 Patent.

42. On information and belief, the infringing swage mounts, including but not limited to those incorporated into the HGST HDD product identified in the preceding paragraph, are optimized low profile base plates for attaching a suspension assembly to an actuator arm in a hard disk drive. The infringing swage mounts comprise a flange having a flange thickness (T_{BP}); and a hub having a hub height (H_H), a hub radial width (W_H), a land height hub inner surface depth (H_{IS}), and a lead in shoulder hub counter bore height (H_{cb}); wherein:

$$\frac{W_H}{T_{BP}} \cdot \frac{W_H}{(H_{IS} + H_H - H_{cb})/2} \geq 5.$$

43. On information and belief, NHK USA has been and now is directly infringing at least one claim of the '841 Patent in the State of California, in this judicial District, and elsewhere in the United States by making, using, offering to sell, selling, and/or importing into the United States infringing swage mounts for use in HDD products.

44. On information and belief, Defendants have been and now are indirectly infringing the '841 Patent by way of inducing infringement of the '841 Patent by supplying infringing swage mounts with the knowledge and specific intent that they will be incorporated into HDD products that will be offered for sale and sold in the State of California, in this judicial District, and elsewhere in the United States.

45. OSK had actual knowledge of the '841 Patent at least as early as April 30, 2007, and at least since that date had actual knowledge that one or more of its swage mounts infringes one or more claims of the '841 Patent.

46. NHK had actual knowledge of the '841 Patent at least as early as June 29, 2007, and at least since that date had actual knowledge that one or more of the swage mounts it incorporates into its suspension assemblies infringes one or more claims of the '841 Patent.

47. On information and belief, Defendants have manufactured, offered for sale, and sold infringing swage mounts after gaining knowledge of the '841 Patent and after gaining knowledge that products that incorporate their infringing swage mounts utilizing the patented technology of the '841 Patent have been made, used, offered for sale, sold, and/or imported into the United States.

48. One or more direct and indirect customers of Defendants have directly infringed the '841 Patent by using, offering to sell, selling, and/or importing into the United States HDD products that incorporate the Defendants' infringing swage mounts. Such direct and indirect customers of Defendants include third-party HDD manufacturers like HGST, retailers of HDD

1 products manufactured and sold by third-party HDD manufacturers like HGST, and end users of
2 HDD products manufactured and sold by third-party HDD manufacturers like HGST.

3 49. On information and belief, Defendants know that this activity by its direct and
4 indirect customers directly infringes the '841 Patent, or they are willfully blind to the fact that
5 this activity by their direct and indirect customers directly infringes the '841 Patent.

6 50. On information and belief, Defendants have knowingly and actively aided and
7 abetted the direct infringement of the '841 Patent by supplying, directly or through
8 intermediaries, their infringing swage mounts to third parties such that those third parties can
9 incorporate the infringing swage mounts into HDD products that Defendants know will be used,
10 offered for sale, sold, and/or imported into the United States in a manner that directly infringes
11 the '841 Patent. Defendants have engaged in affirmative acts to encourage others' direct
12 infringement by promoting, marketing, and selling infringing swage mounts that utilize the
13 patented technology of the '841 Patent for use in HDD products, with the knowledge and
14 specific intent that at least a portion of the HDD products will be used, offered for sale, sold,
15 and/or imported into the United States. For example, Defendants encourage the use of their
16 infringing swage mounts in HDD products on their websites. On information and belief,
17 Defendants provide technical assistance to their direct and indirect customers to help them to
18 incorporate the infringing swage mounts into HDD products, which Defendants know will be
19 used, offered for sale, sold, and/or imported into the United States.

20 51. Defendants have continued their infringing activities after receiving notice of the
21 '841 Patent and, therefore, such infringement is willful, entitling IPT to the recovery of increased
22 damages under 35 U.S.C. § 284. OSK's infringement has been willful at least since April 30,
23 2007. NHK's infringement has been willful at least since June 29, 2007.

24 52. The infringing activities by Defendants have caused and will continue to cause
25 irreparable injury to IPT for which there exists no adequate remedy at law.

26 **PRAYER FOR RELIEF**

27 WHEREFORE Plaintiff respectfully prays that this Court:
28

(1) Enter judgment declaring that Defendants have infringed, directly and/or indirectly, literally and/or under the doctrine of equivalents, the Patent-in-Suit in violation of 35 U.S.C. § 271;

(2) Issue a permanent injunction enjoining Defendants, their officers, agents, subsidiaries, and employees, and those in privity or in active concert with them, from further activities that constitute infringement of the Patent-in-Suit within the State of California and across the United States;

(3) Declare that Defendants' infringement of the Patent-in-Suit is willful and deliberate pursuant to 35 U.S.C. § 284;

(4) Order that IPT be awarded damages adequate to compensate for Defendants' infringement of the Patent-in-Suit, including lost profits and in no event less than a reasonable royalty, and the trebling of such damages because of the willful and deliberate nature of the infringement, together with costs, prejudgment interest, and post-judgment interest;

(5) Declare this an exceptional case under 35 U.S.C. § 285 and award attorneys' fees; and

(6) Order such other and further relief as the Court deems just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, IPT demands a trial by jury on all issues so triable.

Dated: March 3, 2017

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